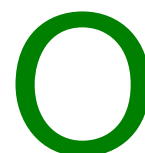


## Disclaimer

This guidance is designed to help implement national policy on effluent limitations guidelines and standards for the pulp, paper, and paperboard industry. This document does not, however, substitute for the CWA or EPA's regulations, nor is it a regulation itself. Thus, it cannot impose legally binding requirements on EPA, states, or the regulated community and may not apply to a particular situation based upon these circumstances. EPA and state decisionmakers retain the discretion to adopt approaches on a case-by-case basis that differ from this guidance where appropriate. EPA may change this guidance in the future.

## Executive Summary

n April 15, 1998, the U.S. Environmental Protection Agency (EPA) promulgated revised regulations for the pulp, paper, and paperboard category to control both effluent discharges and air emissions. The promulgation of the revised regulations marks the completion of the first of three phases of the Cluster Rules. As part of Phase I, EPA established effluent limitations guidelines and standards under 40 CFR Part 430 for the following two subcategories:

Subpart B - Bleached Papergrade Kraft and Soda; and  
Subpart E - Papergrade Sulfite.

At the time of publication of this guidance manual, EPA is continuing with Phases II and III to establish revised effluent limitations and standards for the remaining subparts. Over the next several years, EPA plans to complete these phases and will update 40 CFR Part 430 after the completion of each phase.

The purpose of this guidance document is to help you, the permit writer, develop appropriate National Pollutant Discharge Elimination System (NPDES) permits and pretreatment requirements for mills with operations in Subparts B and E. The material presented is intended solely for guidance and does not alter any statutory requirements. For an overview of the NPDES and National Pretreatment Programs, you may refer to Section 2 of this document or to the *U.S. EPA NPDES Permit Writer's Manual* (EPA-833-B-96-003) for more detailed information.

The tables below summarize the April 15, 1998 promulgated regulations for Subparts B and E.

**Table 1: Subpart B BAT Effluent Limitations Guidelines**

Pollutant	BAT(c),(d)			
	Continuous Dischargers		Noncontinuous Dischargers Annual Average (kg/kkg )	Point of Compliance
	1-Day Maximum (kg/kkg)	Monthly Average (kg/kkg)		
TCDD	<ML (a)	(b)	NA	Bleach Plant Effluent
TCDF	31.9 pg/l	(b)	NA	Bleach Plant Effluent
Chloroform	6.92 g/kkg (d)	4.14 g/kkg (d)	NA	Bleach Plant Effluent
Trichlorosyringol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,5-Trichlorocatechol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,6-Trichlorocatechol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,5-Trichloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,6-Trichloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
4,5,6-Trichloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
2,4,5-Trichlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
2,4,6-Trichlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
Tetrachlorocatechol	<ML(a)	(b)	NA	Bleach Plant Effluent
Tetrachloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
2,3,4,6-Tetrachlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
Pentachlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
AOX	0.951 kg/kkg	0.623 kg/kkg	0.512	Final Effluent
COD	Reserved	Reserved	Reserved	Reserved

(a) “<ML” means less than the minimum level specified in Section 430.01(I) for that particular pollutant.

(b) This regulation doesn’t specify a monthly average limitation for this pollutant; however, you may do so as appropriate.

(c) See 40 CFR 430.24(d) for additional limitations that apply to mills that use chlorophenolic biocides.

(d) For mills that certify to use TCF, refer to 40 CFR 430.24(a)(2).

NA - Not applicable for this compliance point.

**Table 2: Subpart B BPT Effluent Limitations Guidelines**

Pollutant	BPT Limitations (b)			
	Continuous Dischargers		Non-Continuous Dischargers	Point of Compliance
	1-Day Maximum	Average of Daily Values for 30 Consecutive Days	Annual Average	
Bleached Kraft Mills Producing Market Pulp Segment				
BOD <sub>5</sub>	15.45 kg/kkg	8.05 kg/kkg	4.52	Final Effluent
TSS	30.4 kg/kkg	16.4 kg/kkg	9.01	Final Effluent
pH	(a)	(a)	(a)	Final Effluent
Bleached Kraft Mills Producing Paperboard, Coarse Paper, and Tissue Paper Segment				
BOD <sub>5</sub>	13.65 kg/kkg	7.1 kg/kkg	3.99	Final Effluent
TSS	24 kg/kkg	12.9 kg/kkg	7.09	Final Effluent
pH	(a)	(a)	(a)	Final Effluent
Bleached Kraft Mills Producing Pulp and Fine Paper Segment				
BOD <sub>5</sub>	10.6 kg/kkg	5.5 kg/kkg	3.09	Final Effluent
TSS	22.15 kg/kkg	11.9 kg/kkg	6.54	Final Effluent
pH	(a)	(a)	(a)	Final Effluent
Soda Mills Producing Pulp and Paper Segment				
BOD <sub>5</sub>	13.7 kg/kkg	7.1 kg/kkg	3.99	Final Effluent
TSS	24.5 kg/kkg	13.2 kg/kkg	7.25	Final Effluent
pH	(a)	(a)	(a)	Final Effluent

(a) Within the range of 5.0 to 9.0 at all times.

(b) See 40 CFR 430.22(b), (c), and (d) for additional limitations that apply to mills that use wet wood yard operations.

**Table 3: Subpart B PSES Effluent Limitations Guidelines**

Pollutant	BAT(c),(d)			
	Continuous Dischargers		Noncontinuous Dischargers Annual Average (kg/kkg )	Point of Compliance
	1-Day Maximum (kg/kkg)	Monthly Average (kg/kkg)		
TCDD	<ML (a)	(b)	NA	Bleach Plant Effluent
TCDF	31.9 pg/l	(b)	NA	Bleach Plant Effluent
Chloroform	6.92 g/kkg	4.14 g/kkg	NA	Bleach Plant Effluent
Trichlorosyringol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,5-Trichlorocatechol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,6-Trichlorocatechol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,5-Trichloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,6-Trichloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
4,5,6-Trichloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
2,4,5-Trichlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
2,4,6-Trichlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
Tetrachlorocatechol	<ML(a)	(b)	NA	Bleach Plant Effluent
Tetrachloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
2,3,4,6-Tetrachlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
Pentachlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
AOX	2.64 kg/kkg	1.41 kg/kkg	NA	Bleach Plant Effluent

(a) “<ML” means less than the minimum level specified in Section 430.01(I) for that particular pollutant.

(b) This regulation doesn’t specify a monthly average limitation for this pollutant; however, you may do so as appropriate.

(c) See 40 CFR 430.26(b) for additional limitations that apply to mills that use chlorophenolic biocides.

(d) For mills that disclose to the pretreatment control authority in a report submitted under 40 CFR 403.12(b) to use TCF, refer to 40 CFR 430.26(a)(2).

NA - Not applicable for this compliance point.

**Table 4: BAT Effluent Limitations Guidelines for Subpart E Ammonium-Based and Specialty-Grade Sulfite Pulp Segments (d), (e)**

Pollutant	Continuous Dischargers		Noncontinuous Dischargers		Point of Compliance
	1-Day Maximum	Monthly Average	1-Day Maximum	Annual Average	
TCDD(a)	<ML(b)	(c)	NA	NA	Bleach Plant Effluent
TCDF(a)	<ML(b)	(c)	NA	NA	Bleach Plant Effluent
Chloroform(a)	Reserved	Reserved	NA	NA	Reserved
Trichlorosyringol(a)	<ML(b)	(c)	NA	NA	Bleach Plant Effluent
3,4,5-Trichlorocatechol(a)	<ML(b)	(c)	NA	NA	Bleach Plant Effluent
3,4,6-Trichlorocatechol(a)	<ML(b)	(c)	NA	NA	Bleach Plant Effluent
3,4,5-Trichloroguaiacol(a)	<ML(b)	(c)	NA	NA	Bleach Plant Effluent
3,4,6-Trichloroguaiacol(a)	<ML(b)	(c)	NA	NA	Bleach Plant Effluent
4,5,6-Trichloroguaiacol(a)	<ML(b)	(c)	NA	NA	Bleach Plant Effluent
2,4,5-trichlorophenol(a)	<ML(b)	(c)	NA	NA	Bleach Plant Effluent
2,4,6-trichlorophenol(a)	<ML(b)	(c)	NA	NA	Bleach Plant Effluent
Tetrachlorocatechol(a)	<ML(b)	(c)	NA	NA	Bleach Plant Effluent
Tetrachloroguaiacol(a)	<ML(b)	(c)	NA	NA	Bleach Plant Effluent
2,3,4,6-Tetrachlorophenol(a)	<ML(b)	(c)	NA	NA	Bleach Plant Effluent
pentachlorophenol(a)	<ML(b)	(c)	NA	NA	Bleach Plant Effluent
AOX	Reserved	Reserved	Reserved	Reserved	Reserved
COD	Reserved	Reserved	Reserved	Reserved	Reserved

(a) These limitations do not apply to fiber lines that use a TCF bleaching process.

(b) “<ML” means less than the minimum level specified in Section 430.01(i) for that particular pollutant.

(c) This regulation does not specify monthly average limitations for this pollutant; however, you may do so as appropriate.

(d) For mills that certify to use TCF, refer to 40 CFR 430.54(a)(2)(ii) and 40 CFR 430.54(a)(3)(ii).

(e) See 40 CFR 430.54(b) for additional limitations that apply to mills that use chlorophenolic biocides.

NA - Not applicable for this compliance point.

**Table 5: BAT Effluent Limitations Guidelines for Calcium-, Magnesium-, or Sodium-Based Sulfite Segments**

Pollutant	Final Effluent in kg/kkg (or pounds per 1,000 lbs) of Product				Point of Compliance
	Continuous Dischargers		Noncontinuous Dischargers		
	1-Day Maximum	Monthly Average	1-Day Maximum	Annual Average	
AOX	<ML(a)	(b)	<ML(a)	(b)	Final Effluent
COD	Reserved	Reserved	Reserved	Reserved	Reserved

(a) “<ML” means less than the minimum level specified in Section 430.01(i) for that particular pollutant.

(b) This regulation does not specify this type of limitation; however, you may do so as appropriate.

**Table 6: Subpart E BPT Effluent Limitations Guidelines(1)**

Segment	Pollutant (a)	BPT Limitations in kg/kkg (or pounds per 1,000 lbs) of product			Point of Compliance
		Continuous dischargers		Noncontinuous dischargers	
		1 Day Maximum	Average of daily values for 30 consecutive days	Annual Average	
Papergrade Sulfite Mills Using Blow Pit Washing Techniques (2)	Bisulfite liquor/surface condensers				
	BOD <sub>5</sub>	31.8	16.55	9.3	Final Effluent
	TSS	43.95	23.65	13	Final Effluent
	Bisulfite liquor/barometric condensers				
	BOD <sub>5</sub>	34.7	18.05	10.14	Final Effluent
	TSS	52.2	28.1	15.44	Final Effluent
	Acid sulfite liquor/surface condensers				
	BOD <sub>5</sub>	32.3	16.8	9.44	Final Effluent
	TSS	43.95	23.65	13	Final Effluent
	Acid sulfite liquor/barometric condensers				
	BOD <sub>5</sub>	35.55	18.5	10.39	Final Effluent
	TSS	52.2	28.1	15.44	Final Effluent
Papergrade Sulfite Mills Using Vacuum or Pressure Drums to Wash Pulp (2)	Bisulfite liquor/surface condensers)				
	BOD <sub>5</sub>	26.7	13.9	7.81	Final Effluent
	TSS	43.95	23.65	13	Final Effluent
	Bisulfite liquor/barometric condensers				
	BOD <sub>5</sub>	29.4	15.3	8.6	Final Effluent
	TSS	52.2	28.1	15.44	Final Effluent
	Acid sulfite liquor/surface condensers				
	BOD <sub>5</sub>	29.75	15.5	8.71	Final Effluent
	TSS	43.95	23.65	13	Final Effluent
	Acid sulfite liquor/barometric condensers				
	BOD <sub>5</sub>	32.5	16.9	9.49	Final Effluent
	TSS	52.2	28.1	15.44	Final Effluent
Papergrade Sulfite Using Vacuum or Pressure Drums to Wash Pulp (2)	Continuous digester				
	BOD <sub>5</sub>	38.15	19.85	11.15	Final Effluent
	TSS	53.75	28.95	15.91	Final Effluent

(1) See 40 CFR 430.52(b), (c), and (d) for additional limitations that apply to mills that use wet woodyard operations.

(2) Each segment includes pH limitations guidelines within the range of 5.0 to 9.0 at all times.

**Table 7: PSES Effluent Limitations Guidelines for Subpart E Ammonium-Based and Specialty-Grade Sulfite Pulp Segments (d), (e)**

Pollutant	Continuous Dischargers		Point of Compliance
	1-Day Maximum	Monthly Average	
TCDD(a)	<ML(b)	(c)	Bleach Plant Effluent
TCDF(a)	<ML(b)	(c)	Bleach Plant Effluent
Trichlorosyringol(a)	<ML(b)	(c)	Bleach Plant Effluent
3,4,5-Trichlorocatechol(a)	<ML(b)	(c)	Bleach Plant Effluent
3,4,6-Trichlorocatechol(a)	<ML(b)	(c)	Bleach Plant Effluent
3,4,5-Trichloroguaiacol(a)	<ML(b)	(c)	Bleach Plant Effluent
3,4,6-Trichloroguaiacol(a)	<ML(b)	(c)	Bleach Plant Effluent
4,5,6-Trichloroguaiacol(a)	<ML(b)	(c)	Bleach Plant Effluent
2,4,5-trichlorophenol(a)	<ML(b)	(c)	Bleach Plant Effluent
2,4,6-trichlorophenol(a)	<ML(b)	(c)	Bleach Plant Effluent
Tetrachlorocatechol(a)	<ML(b)	(c)	Bleach Plant Effluent
Tetrachloroguaiacol(a)	<ML(b)	(c)	Bleach Plant Effluent
2,3,4,6-Tetrachlorophenol(a)	<ML(b)	(c)	Bleach Plant Effluent
pentachlorophenol(a)	<ML(b)	(c)	Bleach Plant Effluent

(a) These limitations do not apply to fiber lines that use a TCF bleaching process.

(b) “<ML” means less than the minimum level specified in Section 430.01(i) for that particular pollutant.

(c) This regulation does not specify monthly average limitations for this pollutant; however, you may do so as appropriate.

(d) For mills that disclose to the pretreatment control authority in a report submitted under 40 CFR 403.12(b) to use TCF, refer to 40 CFR 430.56(a)(2)(ii) and 40 CFR 430.56(a)(3)(ii).

(e) See 40 CFR 430.56(b) for additional limitations that apply to mills that use chlorophenolic biocides.

NA - Not applicable for this compliance point.

**Table 8: PSES Effluent Limitations Guidelines for Calcium-, Magnesium-, or Sodium-Based Sulfite Segments**

Pollutant	Final Effluent in kg/kkg (or pounds per 1,000 lbs) of Product				Point of Compliance
	Continuous Dischargers		Noncontinuous Dischargers		
	1-Day Maximum	Monthly Average	1-Day Maximum	Annual Average	
AOX	<ML(a)	(b)	<ML(a)	(b)	Final Effluent

(a) “<ML” means less than the minimum level specified in Section 430.01(i) for that particular pollutant.

(b) This regulation does not specify this type of limitation; however, you may do so as appropriate.



**Table 9: Subpart B New Source Performance Standards (c), (d)**

Pollutant	Bleach Plant Effluent		Final Effluent	Point of Compliance
	Continuous Dischargers		Noncontinuous Dischargers	
	1-Day Maximum	Monthly Average	Annual Average (kg/kkg)	
TCDD	<ML (a)	(b)	NA	Bleach Plant Effluent
TCDF	31.9 pg/L	(b)	NA	Bleach Plant Effluent
Chloroform	6.92 g/kkg	4.14 g/kkg	NA	Bleach Plant Effluent
Trichlorosyringol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,5-Trichlorocatechol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,6-Trichlorocatechol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,5-Trichloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,6-Trichloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
4,5,6-Trichloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
2,4,5-Trichlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
2,4,6-Trichlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
Tetrachlorocatechol	<ML(a)	(b)	NA	Bleach Plant Effluent
Tetrachloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
2,3,4,6-Tetrachlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
Pentachlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
AOX	0.476 kg/kkg	0.272 kg/kkg	0.208 kg/kkg	Final Effluent
BOD <sub>5</sub>	4.52 kg/kkg	2.41 kg/kkg	1.73 kg/kkg	Final Effluent
TSS	8.47 kg/kkg	3.86 kg/kkg	2.72 kg/kkg	Final Effluent
pH	5 - 9	5-9	5 - 9	Final Effluent
COD	Reserved	Reserved	Reserved	Reserved

(a) "ML" means less than the minimum level specified in Section 430.01(I) for that particular pollutant.

(b) This regulation does not specify this type of limitation for this pollutant; however, you may do so as appropriate.

(c) See 40 CFR 430.25(a) for limitations that apply to mills that commenced discharge after June 15, 1988 and before June 15, 1998.

(d) For mills that certify to use TCF, refer to 40 CFR 430.25(b)(2).

NA - Not applicable for this compliance point.

**Table 10: Subpart B Pretreatment Standards for New Sources (c), (d)**

Pollutant	Bleach Plant Effluent		Final Effluent	Point of Compliance
	Continuous Dischargers		Noncontinuous Dischargers	
	1-Day Maximum	Monthly Average	Annual Average (kg/kkg)	
TCDD	<ML (a)	(b)	NA	Bleach Plant Effluent
TCDF	31.9 pg/L	(b)	NA	Bleach Plant Effluent
Chloroform	6.92 g/kkg	4.14 g/kkg	NA	Bleach Plant Effluent
Trichlorosyringol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,5-Trichlorocatechol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,6-Trichlorocatechol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,5-Trichloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
3,4,6-Trichloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
4,5,6-Trichloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
2,4,5-Trichlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
2,4,6-Trichlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
Tetrachlorocatechol	<ML(a)	(b)	NA	Bleach Plant Effluent
Tetrachloroguaiacol	<ML(a)	(b)	NA	Bleach Plant Effluent
2,3,4,6-Tetrachlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
Pentachlorophenol	<ML(a)	(b)	NA	Bleach Plant Effluent
AOX	1.16 kg/kkg	0.814 kg/kkg	NA	Bleach Plant Effluent
BOD <sub>5</sub>	4.52 kg/kkg	2.41 kg/kkg	1.73 kg/kkg	Final Effluent
TSS	8.47 kg/kkg	3.86 kg/kkg	2.72 kg/kkg	Final Effluent
pH	5 - 9	5-9	5 - 9	Final Effluent
COD	Reserved	Reserved	Reserved	Reserved

(a) "ML" means less than the minimum level specified in Section 430.01(I) for that particular pollutant.

(b) This regulation does not specify this type of limitation for this pollutant; however, you may do so as appropriate.

(c) See 40 CFR 430.27(b) for additional limitations that apply to mills that use chlorophenolic biocides.

(d) For mills that disclose to the pretreatment control authority in a report under 40 CFR 403.12(b) that they use TCF, refer to 40 CFR 430.27(a)(2)).

NA - Not applicable for this compliance point.

**Table 11: Subpart E New Source Performance Standards for Conventional Pollutants**

Pollutant Parameter	Final Effluent		
	Kg/kg (or pounds per 1,000 lbs) of Product		
	Continuous Dischargers		Noncontinuous Dischargers
	1 Day Maximum	Average of Daily Values for 30 Consecutive Days	Annual Average
BOD <sub>5</sub>	4.38 exp(0.017x)	2.36exp(0.017x)	Average of daily values for 30 consecutive days divided by 1.91
TSS	5.81exp(0.017x)	3.03exp(0.017x)	Average of daily values for 30 consecutive days divided by 1.90
pH	(a)	(a)	(a)

x - Percent sulfite pulp in final product.

(a) Within range of 5 to 9.

**Table 12: Pretreatment Standards for New Sources for Subpart E Ammonium-Based and Specialty-Grade Sulfite Pulp Segments (d), (e)**

Pollutant	Continuous Dischargers		Point of Compliance
	1-Day Maximum	Monthly Average	
TCDD(a)	<ML(b)	(c)	Bleach Plant Effluent
TCDF(a)	<ML(b)	(c)	Bleach Plant Effluent
Trichlorosyringol(a)	<ML(b)	(c)	Bleach Plant Effluent
3,4,5-Trichlorocatechol(a)	<ML(b)	(c)	Bleach Plant Effluent
3,4,6-Trichlorocatechol(a)	<ML(b)	(c)	Bleach Plant Effluent
3,4,5-Trichloroguaiacol(a)	<ML(b)	(c)	Bleach Plant Effluent
3,4,6-Trichloroguaiacol(a)	<ML(b)	(c)	Bleach Plant Effluent
4,5,6-Trichloroguaiacol(a)	<ML(b)	(c)	Bleach Plant Effluent
2,4,5-trichlorophenol(a)	<ML(b)	(c)	Bleach Plant Effluent
2,4,6-trichlorophenol(a)	<ML(b)	(c)	Bleach Plant Effluent
Tetrachlorocatechol(a)	<ML(b)	(c)	Bleach Plant Effluent
Tetrachloroguaiacol(a)	<ML(b)	(c)	Bleach Plant Effluent
2,3,4,6-Tetrachlorophenol(a)	<ML(b)	(c)	Bleach Plant Effluent
pentachlorophenol(a)	<ML(b)	(c)	Bleach Plant Effluent

(a) These limitations do not apply to fiber lines that use a TCF bleaching process.

(b) “<ML” means less than the minimum level specified in Section 430.01(i) for that particular pollutant.

(c) This regulation does not specify monthly average limitations for this pollutant; however, you may do so as appropriate.

(d) For mills that disclose to the pretreatment control authority in a report submitted under 40 CFR 403.12(b) to use TCF, refer to 40 CFR 430.57(a)(2)(ii) and 40 CFR 430.57(a)(3)(ii).

(e) See 40 CFR 430.57(b) for additional limitations that apply to mills that use chlorophenolic biocides.

NA - Not applicable for this compliance point.

**Table 13: Pretreatment Standards for New Sources for Calcium-, Magnesium-, or Sodium-Based Sulfite Segments**

Pollutant	Final Effluent in kg/kkg (or pounds per 1,000 lbs) of Product		Point of Compliance
	Continuous Dischargers		
	1-Day Maximum	Monthly Average	
AOX	<ML(a)	(b)	Final Effluent

(a) “<ML” means less than the minimum level specified in Section 430.01(i) for that particular pollutant.

(b) This regulation does not specify this type of limitation; however, you may do so as appropriate.

**Table 14: VATIP Effluent Limitations Guidelines and Standards**

Tier	Kappa Number (Annual Average)	Filtrate Recycling	Total Pulping Area Condensate, Evaporator Condensate, and Bleach Plant Wastewater Flow (Annual Average)	End-of-Pipe AOX (kg/kkg)			
				Non-TCF (a)		TCF	
				Maximum for Any One Day	Annual Average	Maximum for Any One Day	Annual Average
Tier I	20 for SW 13 for HW	(b)	NA	0.58	0.26	<ML (c)	(d)
Tier II	NA	(b)	10 m <sup>3</sup> /kkg	0.23	0.10	<ML (c)	(d)
Tier III	NA	(b)	5 m <sup>3</sup> /kkg	0.11	0.05	<ML (c)	(d)

(a) Non-TCF: pertains to any fiber lines that does not use exclusively TCF bleaching processes.

(b) Complete recycling to the chemical recovery system of all filtrates generated prior to bleaching. Under Tier I, this includes all filtrates up to the point where the kappa number is measured.

(c) <ML means less than the minimum level specified in 430.01(I) for that particular pollutant.

(d) This regulation does not specify this type of limitation for this pollutant; however, you may do so as appropriate.

NA - Not applicable.